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# **Global Sustainable Urban Development Indicators (GDI): HUD and White House Working Group**

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OECD Working Party on Territorial Indicators

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# GDI Overview

- Developed during World Urban Forum, March 2010 due to urbanization discussions and effects
- Partners from World Urban Forum uniquely positioned to collaborate in the United States and internationally – multi-sector, diverse, urban and rural mandates
- U.S. cities and agencies taking ambitious steps toward sustainable development
- Working group co-led by the White House Office of Urban Affairs and HUD
- **Aim to develop indicators that demonstrate the progress that American cities are making toward sustainable urban development and inform supportive policy, planning and investment.**



## GDI Overview (cont'd)

- Penn State professors and PhD students participating in working group and leading analysis
- American Planning Association staff and working group members coordinating closely with Penn State team
- Initial analysis from Penn State presented to subset of working group two weeks ago
- Working group members attended World Urban Campaign meetings in Shanghai, China to present materials, leading to interest in process for China
- Working group members attended launch of Sustainable Urban Housing Competition in early November, leading to further interest in partnering on GDI for Brazil and Latin America



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# GDI Goals

## **Goal 1:**

Scan North American indicators and outcomes which evaluate successful sustainable urban development and revitalization strategies.

## **Goal 2:**

Match these metrics in context of global best practices.

## **Goal 3:**

Submit suggestions on potential common language, normative principles, and universal benchmarks around sustainability



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## Indicators will:

- Adhere largely to political jurisdictions, i.e. cities.
- Be informed by international research and understandings, but tailored to domestic needs.
- Apply broadly, to American cities and metropolitan areas of all sizes and locales.
- Relate primarily to data that cities already collect and/or are interested in and motivated to collect over the long term.
- Be simple, few, and succinct, but supplemented with contextual information.



# GDI Framework

<b>Dimension of Sustainable Urban Development</b>	<b>Elements necessary for sustainable urban development:</b>
Social Wellbeing	<ul style="list-style-type: none"><li>•Health</li><li>•Safety</li><li>•Local or civic identity/sense of place</li><li>•Access to decent – affordable – housing and services</li><li>•Access to public recreation and open space</li><li>•Access to a variety of transportation options</li></ul>
Economic Opportunity	<ul style="list-style-type: none"><li>•A diversified and competitive local and regional economy</li><li>•Transportation and other infrastructure coordinated with land use</li><li>•Growth plans that leverage existing assets</li><li>•Access to capital and credit</li><li>•Access to education, jobs, and training</li></ul>
Environmental Quality	<ul style="list-style-type: none"><li>•Efficient land use</li><li>•Use of renewable resources</li><li>•Waste/pollution minimization and management</li><li>•Climate change and natural disaster mitigation, adaptation, and resilience</li><li>•Carbon efficient, environmentally sound, transportation</li><li>•A diverse natural environment and functional ecological systems</li></ul>



# Sources of Indicator Information & Data

## Institutional (1)

- Columbia Univ. + Yale Univ. – *2010 Environmental Performance Index*

## Non-Profits / NGO (9)

- CAP, ICLEI + USGBC – STAR Community Index
- GBCA (Australia) – *Green Star*
- Global Reporting Initiative – *Sustainability Reporting Guidelines*
- International Institute for Sustainable Development
- Urban Ecology Coalition – *Neighborhood Sustainability Indicators Guidebook*
- USGBC – *LEED ND*
- The World Bank – *Global City Indicators Facility*
- ACSE – *Sustainability Action Plan*
- International Sustainability Indicators Network
- The World Bank – *Sustainable Development*



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# Sources of Indicator Information & Data

## Private Organizations (3)

- ASLA + Lady Bird Johnson Wildflower Center – *Sustainable Sites Initiative*
- PricewaterhouseCoopers – *Cities of Opportunity*
- Siemens – *European Green City Index*

## National / Municipal Governments (9)

- Abu Dhabi – *Estidama*
- European Foundation – *Urban Sustainability Indicators*
- Central Texas Sustainability Indicators Project
- Houston Sustainability Indicators
- Minneapolis Sustainability Indicators
- Portland Planning and Sustainability
- Santa Monica Sustainability Plan
- Whistler Monitor Program
- Sustainable Seattle

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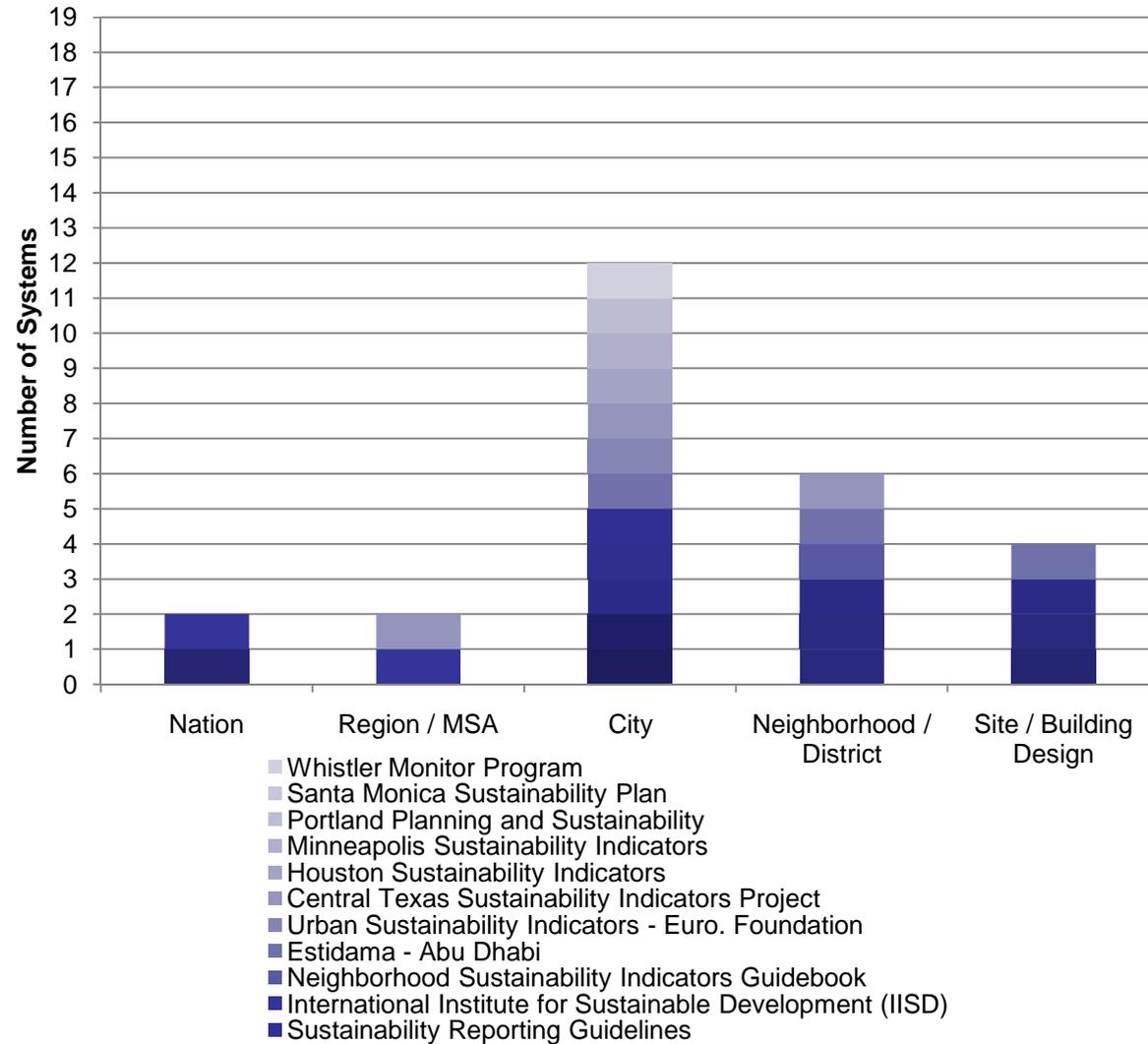
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# Scale of Focus



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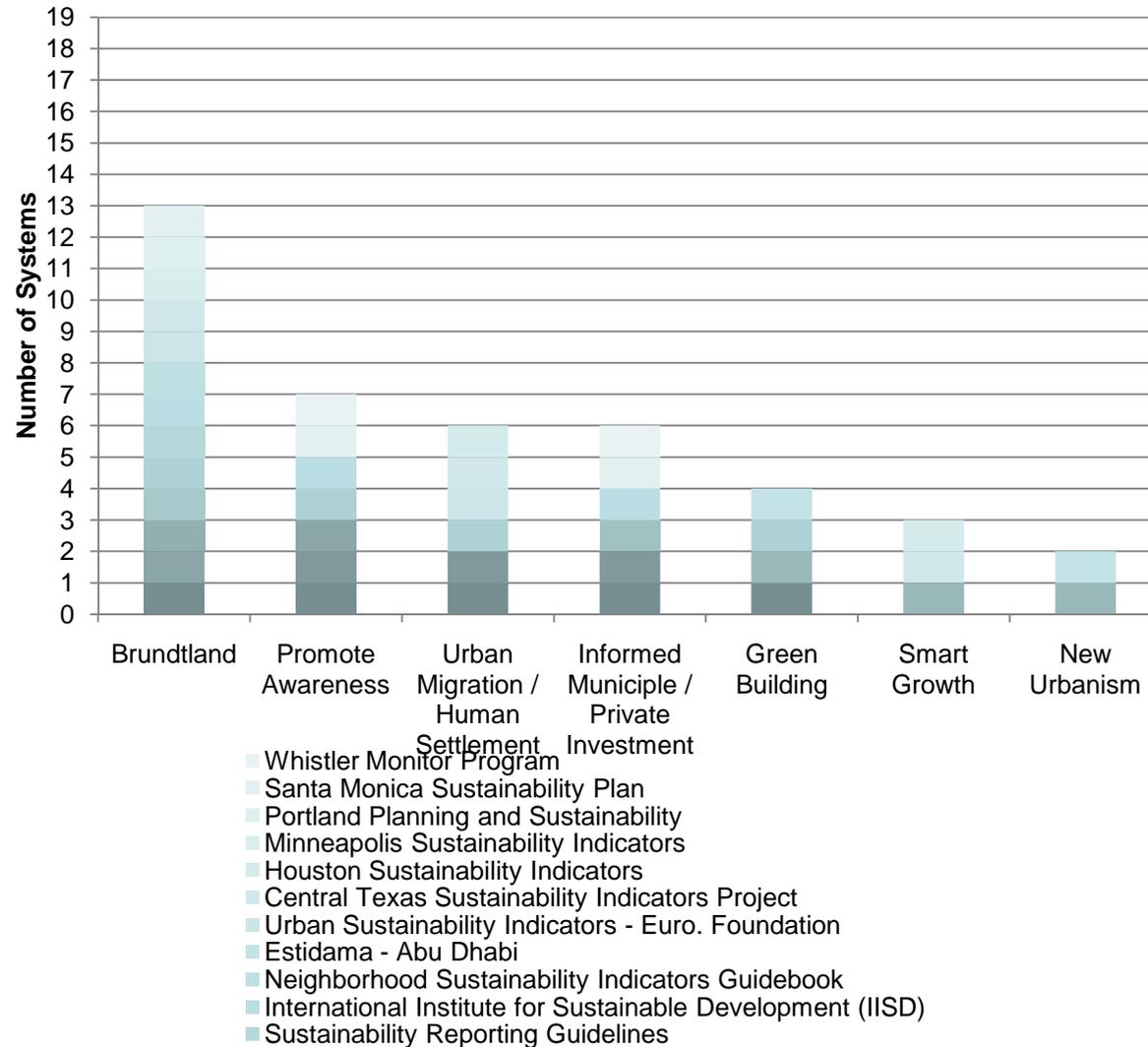
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# Principles of Sustainability



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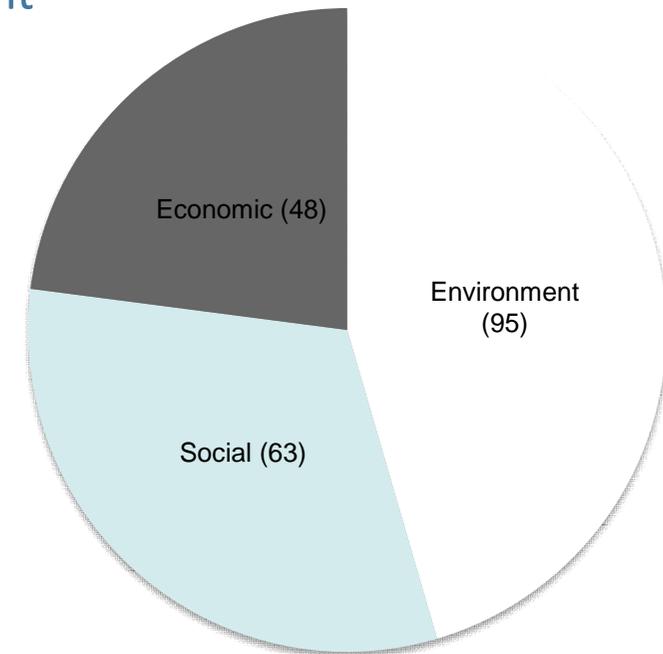
# General Observations: Sources and Indicators

- Many Indicator Systems are not SMART?: Specific, Measurable, Attainable, Repeatable, Timely
  - **Measurable?**
    - Surveys sources inaccessible (Fortune 500 CEOs)?
  - **Repeatable?**
    - Custom datasets that need to be purchased?
  - **Timely?**
    - One-time survey?
- How many indicators have we reviewed?
  - 139 Environmental – 44 Not SMART
  - 126 Social – 63 Not SMART
  - 70 Economic – 22 Not SMART



# Indicator Makeup

- The number of SMART indicators is skewed towards Environment and secondarily Social. Economic indicators are more narrowly defined.
- Few indicators overlap categories.
- Transportation is a common theme among each category, but is seen more in environment and social.
- A large number of indicators currently being used do not meet the SMART standards or have an obvious nexus with the three categories.
- Some indicators are used commonly – especially ones that come from readily collected administrative data.





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# Example: Environment Indicators

First cut yields 95 SMART indicators.

24 Single-dimension, 71 Multi-dimensional.

- A large number of indicators, most of which are multi-dimensional. Overlap is an issue, need to pare down to the few SMART-est indicators.
- Ratio of single- to multi- dimensional indicators also shows a lack of specificity. Particularly concerning where an element has few indicators, overall (e.g. diverse natural environment, above).
- Rating and index systems (e.g. LEED, SSI) are comprehensive, but very specific.

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# Example: Environment Indicators Framework Element

	Efficient land use	Use of renewable resources	Waste/pollution minimization and management	Climate change and natural disaster mitigation, adaptation, and resilience	Carbon efficient, environmentally sound, transportation	A diverse natural environment and functional ecological systems
Number of Single-dimensional Indicators covering the area:	1	6	12	0	4	1
Number of Multi-dimensional Indicators covering the area:	52	24	18	31	36	16

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# Next Steps for Working Group

## Short Term (Dec/Jan)

- Revisit indexed systems (e.g. LEED, SSI).
- Pare down existing list: Review indicators in each category for overlap and double counting.
- Supplement with additions: Add indicators that speak to underrepresented elements.
- The objective is to maximize information and minimize the number of indicators, i.e. create a 'lean and mean' indicator system.

## Longer Term (Jan/Feb/Mar)

- Complete indicator crafting/selection and present to working group.
- Select several American cities in which to pilot the new system.
- Apply new indicator system to selected cities paying particular attention to data availability and ease of use.



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